

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

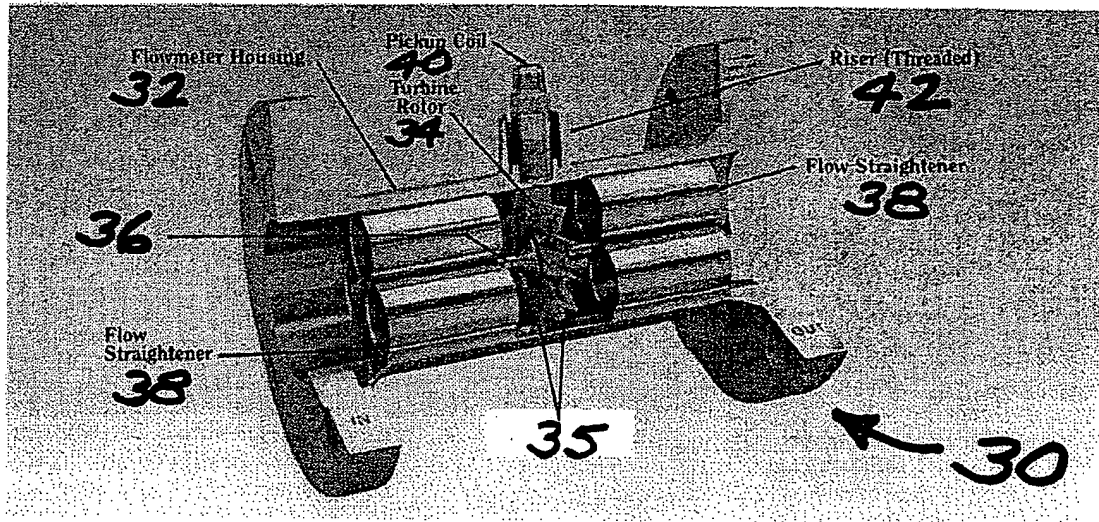


FIG. 1
(PRIOR ART)

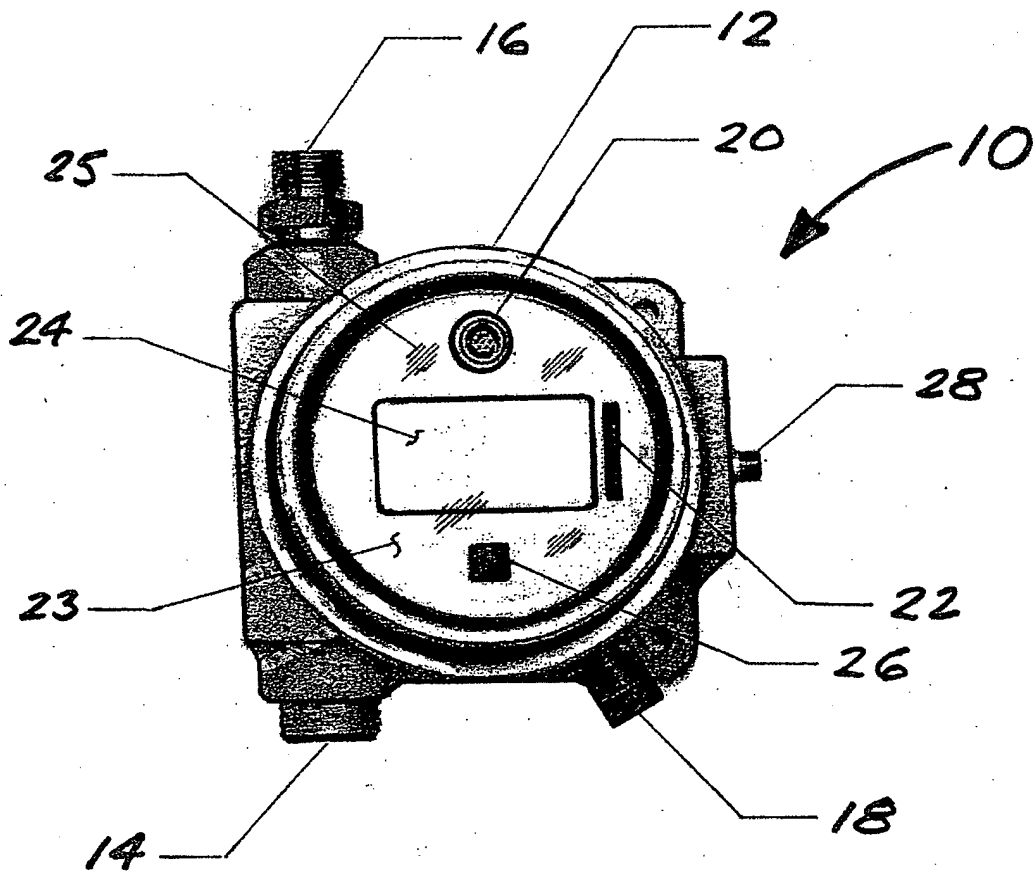


FIG. 2

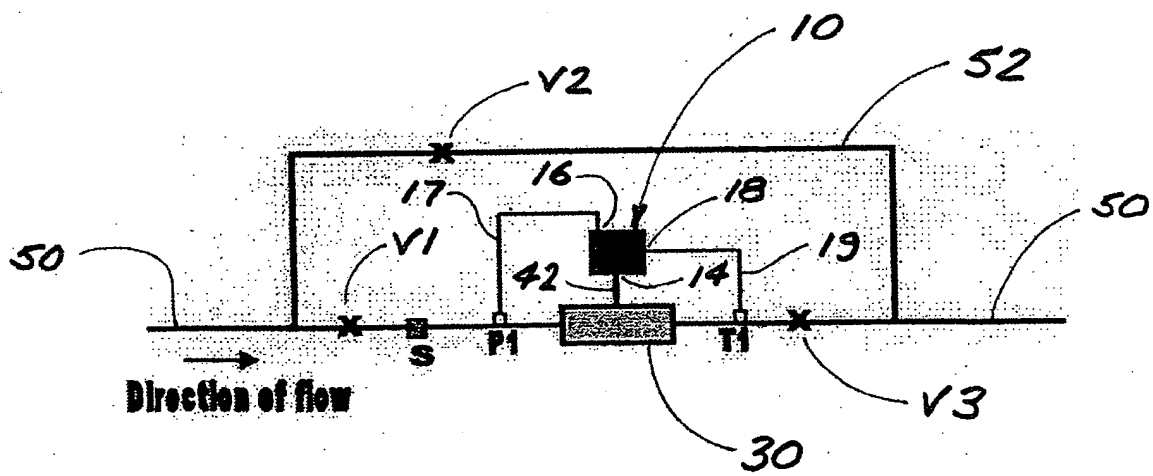


FIG. 3

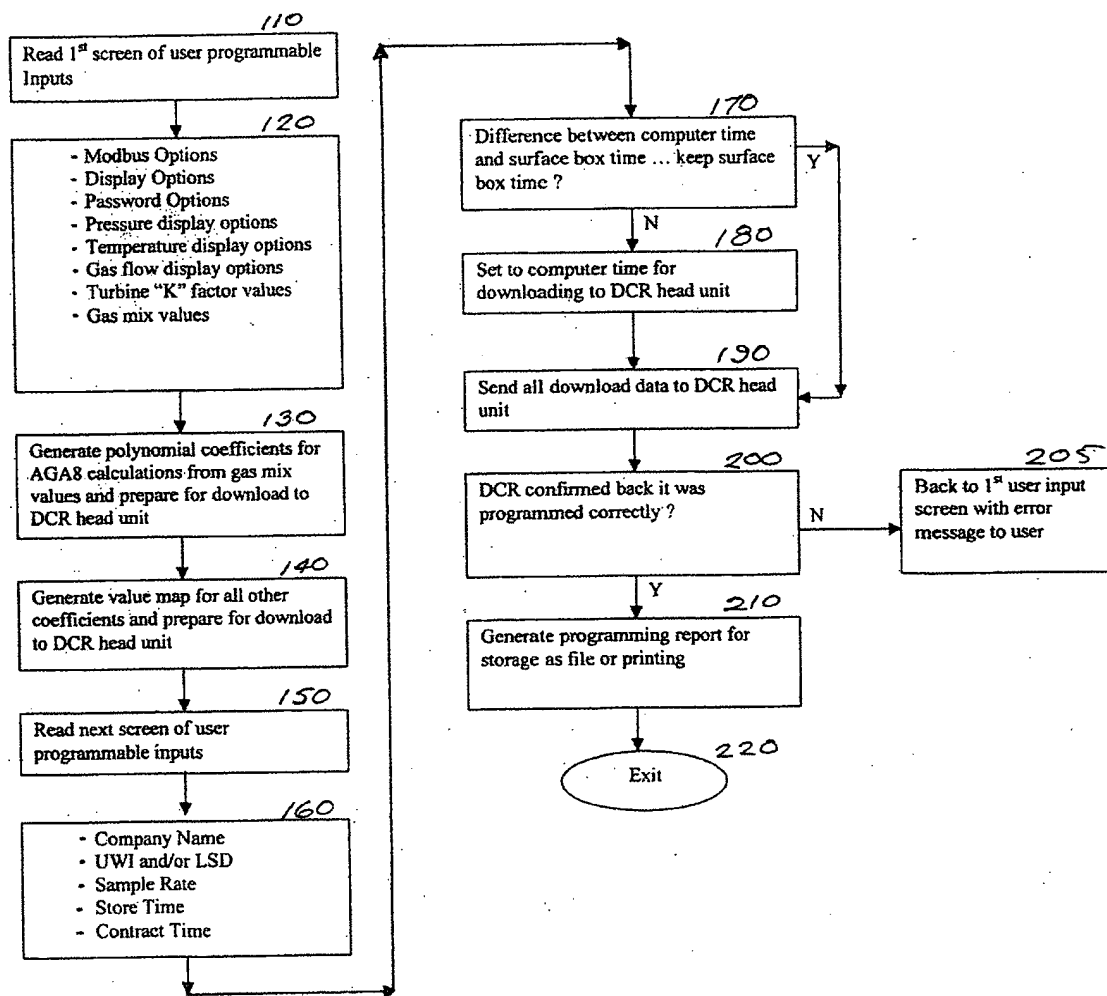
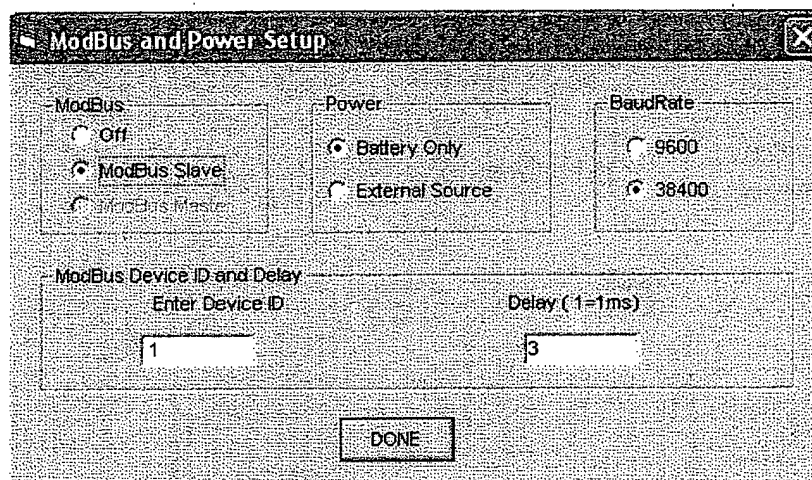


FIG. 4



ModBus and Power Setup

ModBus

☐ Off

☒ ModBus Slave

☐ ModBus Master

Power

☒ Battery Only

☐ External Source

BaudRate

☐ 9600

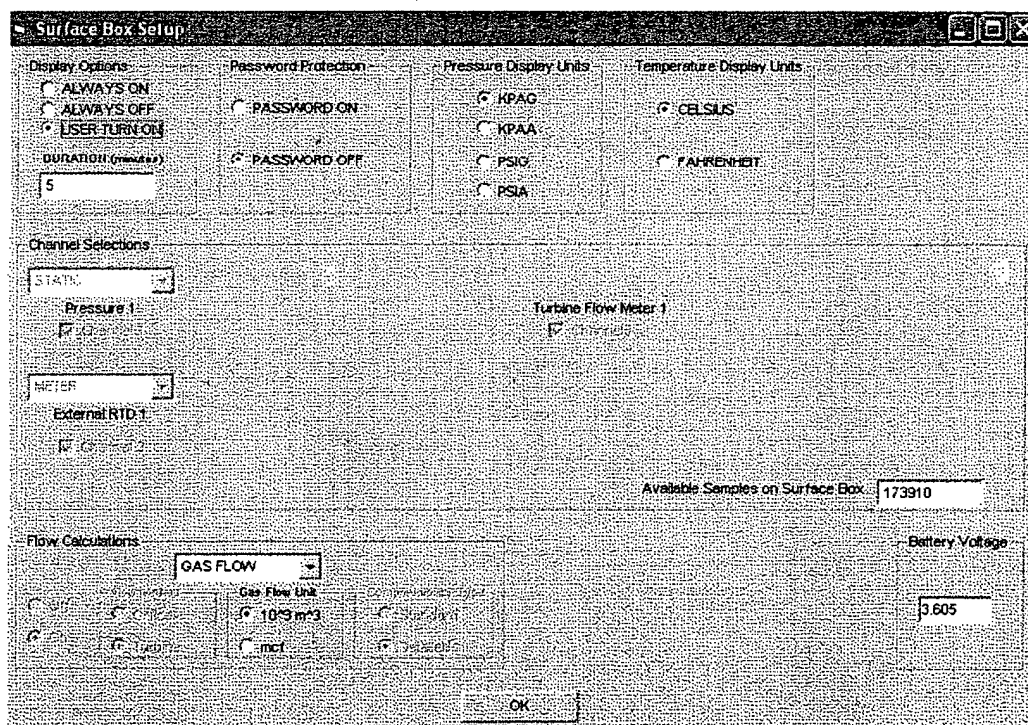
☒ 38400

ModBus Device ID and Delay

Enter Device ID:

Delay (1=1ms):

DONE

FIG. 4A

Surface Box Setup

Display Options

☐ ALWAYS ON

☐ ALWAYS OFF

☒ USER TURN ON

DURATION (minutes):

Password Protection

☐ PASSWORD ON

☒ PASSWORD OFF

Pressure Display Units

☒ KPAG

☐ KPAA

☐ PSIG

☐ PSIA

Temperature Display Units

☒ CELSIUS

☐ FAHRENHEIT

Channel Selections

STATN:

Pressure 1: ☒ On

External RTD 1: ☒ On

Turbine Flow Meter 1: ☒ On

Available Samples on Surface Box:

Flow Calculations

GAS FLOW

☐ Gas Flow Unit: ☒ 10⁻³ m³

☐ Gas Flow Unit: ☐ mcf

☐ Gas Flow Unit: ☐ 10⁻³ m³

☐ Gas Flow Unit: ☐ mcf

Battery Voltage

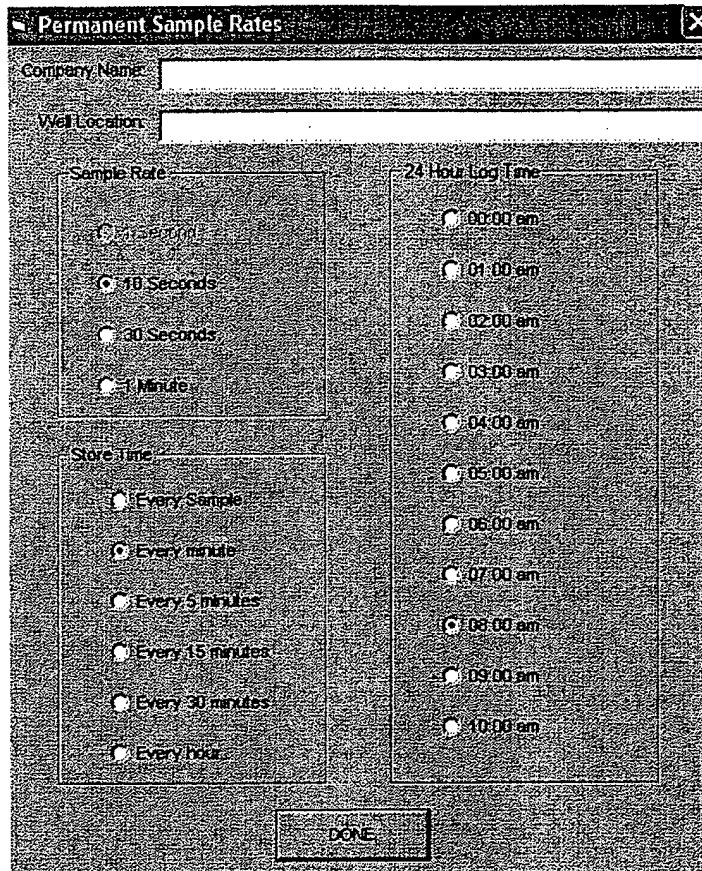
OK

FIG. 4B

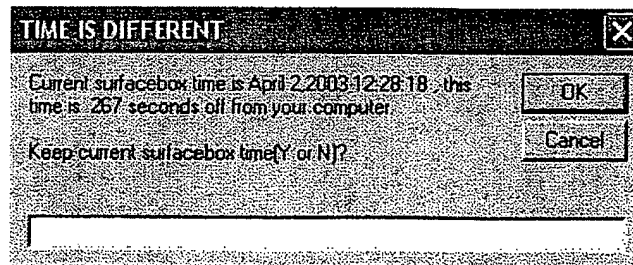
Gas Mix Analysis		GAS PARAMETERS	
Mole Fractions(%)		Atmospheric	13.488 psi
		AGA Base Condition	60 Deg F 14.7 psia
		TURBINE K FACTOR	
		Turbine Serial Number	333
		FREQUENCY (Hz)	K FACTOR
Methane > 0.5 or < 1.0 (C1)	1	1 3000	500
Nitrogen < 0.5 (N2)	0	2 2675	500
Carbon dioxide < 0.3 (CO2)	0	3 2350	500
Ethane < 0.2 (C2)	0	4 2025	500
Propane < 0.05 (C3)	0	5 1700	500
Water < 0.0015 (H2O)	0	6 1375	500
Hydrogen sulfide < 0.0002 (H2S)	0	7 1050	500
Hydrogen < 0.10 (H2)	0	8 725	500
Carbon monoxide < 0.03 (CO)	0	9 400	500
Oxygen < 0.0002 (O2)	0	10 75	500
iso-Butane (iC4)	0		
n-Butane (nC4)	0		
iso-Pentane (iC5)	0		
n-Pentane (nC5)	0		
n-Hexane < 0.001 (nC6)	0		
n-Heptane < 0.0005 (nC7)	0		
n-Octane (nC8)	0		
n-Nonane (nC9)	0		
n-Decane (nC10)	0		
Helium < 0.005 (He)	0		
Argon < 0.0002 (Ar)	0		
Sum of Fractions(%)	1	<input type="radio"/> 1 Factor <input checked="" type="radio"/> 10 Factors	

OK

FIG. 4C

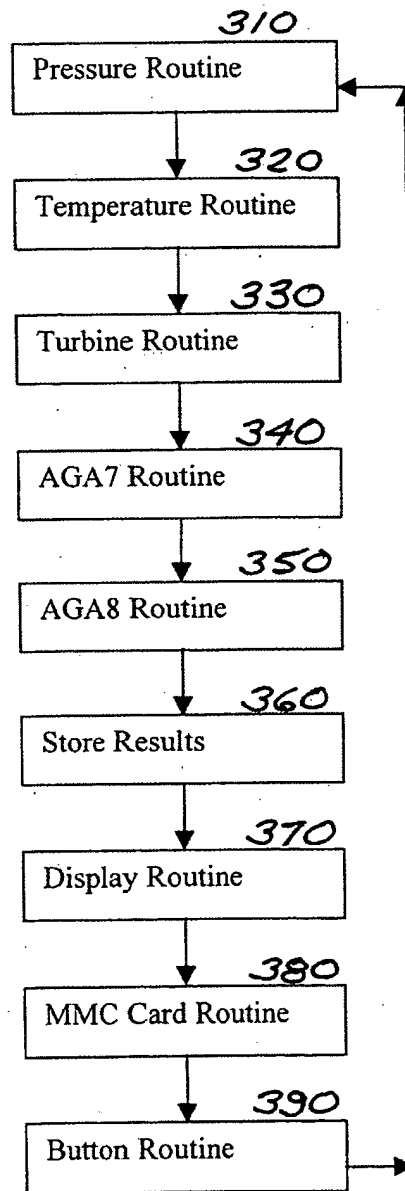


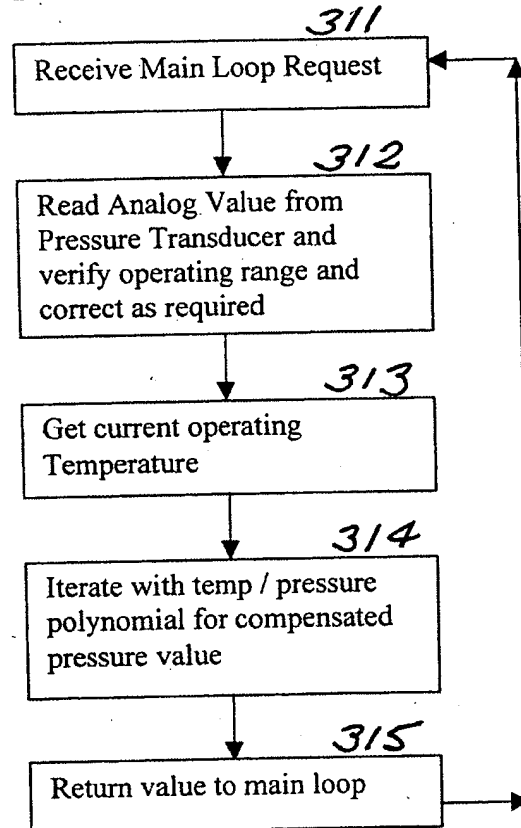
A screenshot of a software dialog box titled "Permanent Sample Rates". It features two input fields at the top: "Company Name" and "Well Location". Below these are two main sections. The "Sample Rate" section on the left contains four radio button options: "Continuous", "10 Seconds", "30 Seconds", and "1 Minute". The "Store Time" section below it contains seven radio button options: "Every Sample", "Every minute", "Every 5 minutes", "Every 15 minutes", "Every 30 minutes", and "Every hour". To the right of these sections is a "24 Hour Log Time" section with a vertical list of radio button options from "00:00 am" to "10:00 am". A "DONE" button is located at the bottom center of the dialog.

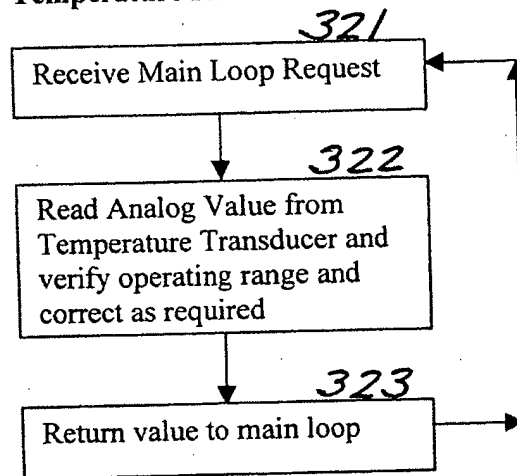
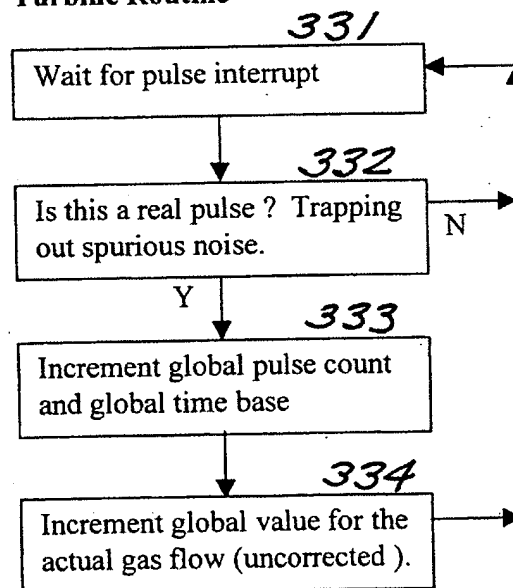
FIG. 4D

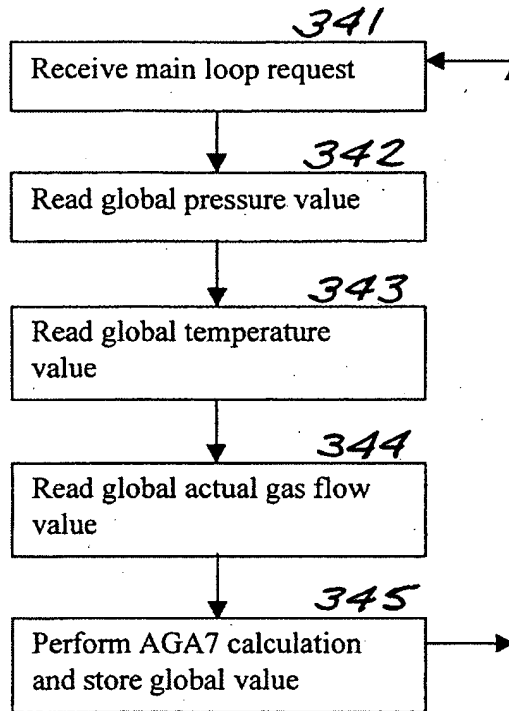
A screenshot of a software dialog box titled "TIME IS DIFFERENT". It contains the text: "Current surfacebox time is April 2, 2003 12:28:18. this time is 267 seconds off from your computer." Below this text is the question "Keep current surfacebox time(Y or N)?" followed by a text input field. On the right side of the dialog are two buttons: "OK" and "Cancel".

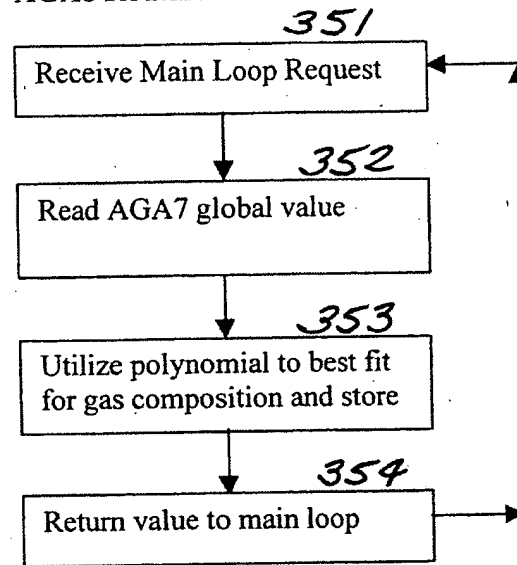
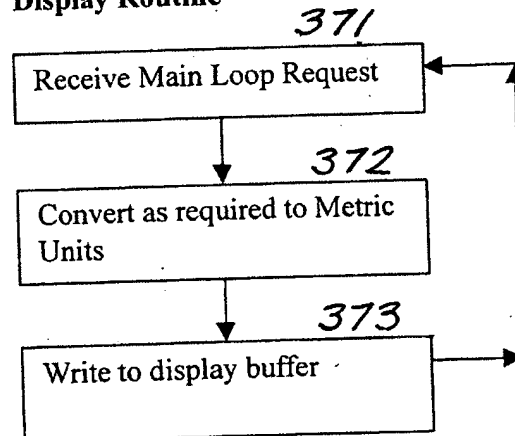
FIG. 4E

Main Operating LoopFIG. 5

Pressure Routine**FIG. 5A**

Temperature RoutineFIG. 5B**Turbine Routine**FIG. 5C

AGA7 RoutineFIG. 5D

AGA8 RoutineFIG. 5E**Display Routine**FIG. 5F

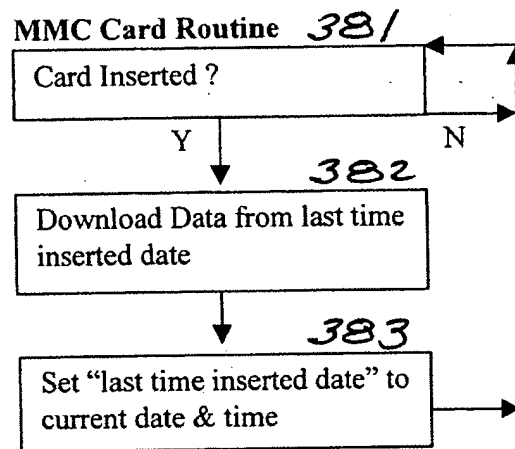


FIG. 5G

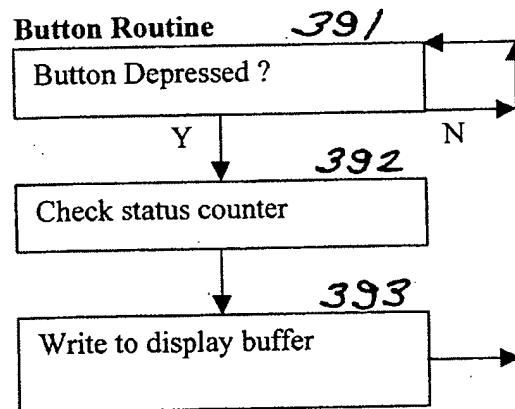


FIG. 5H